Effect of Cost Cuts on KOPIO

- **Active Filter:** This is potentially harmful to microbunnching performance but is difficult to quantify. Woody feels this is a band-aid, whereas fixing the phasing would be a better solution.
- **Spare Booster and AGS Magnet Coils and Collimators:** No direct effect.
- **J10 Bump;Low Ripple P.S.:** No direct effect
- **100 MHz RF Cavity:** This is a backup in order to push the rms microbunch width obtained with the 25 MHz cavity from less than a simulated 500 ps to better than 200 ps. This is difficult to evaluate since results of the FY04 microbunching studies are not in agreemment with the simulations or the FY03 studies. It could be delayed until performance with the 25 MHZ cavity is measured in an engineering run with a finite length production target which contributes an additional timing spread of approximately 1 ps/mm of length. The lead time for obtaining and installing one should be evaluated. Design should proceed in the event that the 100 MHz cavity is found to be essential. Alternate year operation with MECO would allow for fabrication and installation. This probably doesn't violate the AGS upgrade agreement with the Canadian funding sources, but it certainly violates the spirit.